Pesticides and You

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News From the National Coalition Against the Misuse of Pesticides (NCAMP)

"Well, Vern, looks like that buffalo paper you set out this morning is doing the trick."

Heptachlor Contaminates Milk in Six States

Poisoned Milk Illustrates Weak Law

After the second major incident of contamination of the American milk supply by heptachlor in five years, EPA officials are "re-evaluating" their policy of phasing out existing stocks of cancelled pesticides.

In February, Food and Drug Administration (FDA) officials were tipped off to Arkansas, Missouri and Oklahoma milk contaminated with up to 120 times the federal action level for heptachlor, now used only as a sub-surface termiticide (see Chlordane below). The source of the contamination was heptachlor-contaminated mash, fed to cattle after it was illegally sold to farmers by an Arkansas ethanol producer. Mash is a by-product of the seed or grain fermentation process.

By the middle of March, 94 dairies were contaminated and milk had been recalled over a seven state area. As occurred previously in a similar heptachlor milk contamination incident that occurred in Hawaii in 1982, human breast-milk was found to have high concentrations of heptachlor, forcing many mothers to stop breast-feeding their babies.

When EPA cancelled most agricultural uses of heptachlor in the late seventies, certain exceptions were made for: a) ant control in Hawaii pineapple fields; and, b) fungicidal seed treatment, both exemptions ending in 1983. These exemptions, as well as continued structural use as a termiticide, have resulted in many poisonings.

FDA is charged with taking a minimum of 24 samples per year of non-pasteurized, non-grade A, and grade A milk, as well as cheese from 23 districts nationwide. Critics charge that the number is woefully inadequate. While individual states are supposed to take up the slack, Arkansas, for one, had done no monitoring for pesticides since 1984. Oklahoma also had no pesticide screening program in place.

Panacea or Placebo: Is Bottled Water Safe?

Bottled Water Untested for Key Toxins

When the insecticide aldicarb (Temik) was found in Suffolk County, NY's wells, the county Department of Health Services recommended that residents turn to bottled water. Yet the Department never stopped to find out whether the water had been tested for this very chemical, or many others.

Indeed, due to numerous loopholes in current federal regulations developed in compliance with Section 409 of the Federal Food Drug and Cosmetic Act (FFDCA), victims of pesticide contamination who turn to bottled water may well find that the water is not "cleaner" or "safer" than what was coming out of their tap. The refreshing taste may well stem from the addition of any Generally Recognized As Safe (GRAS) compounds (listed under 21 Code of Federal Regulations (CFR) Parts 182-186). Nonetheless, according to one estimate, one of 17 individuals buys bottled water, paying up to 1000 times the price of tap water.

According to 21 CFR Part 103, bottlers must test for only those six pesticides for which drinking water standards, now considered out-of-date, have been established under the 1975 Safe Drinking Water Act (endrin, lindane, methoxychlor, toxaphene, 2,4-D and 2,4,5-TP - Silvex) and then only once a year. The regulations only cover bottled water marketed in **inter**- not **intra** -state commerce and completely exclude mineral water.

Bottlers using an "approved source" as defined in 21 CFR Part 129.3 are required to test the source, whether it be a well, spring or the tap, for only the six pesticides in addition to such chemicals as arsenic and

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EPA Review Begins

Chlordane Debate Rages in the States

Twelve years after EPA first proposed cancelling the agricultural uses of chlordane (Velsicol Chemical Co.) and its contaminant heptachlor, thousands of unknowing Americans continue to be involuntarily exposed to these termiticides in their homes and workplaces. While the states of New York and Massachusetts have moved to ban chlordane, EPA has been slow to act.

Despite growing awareness that a veritable epidemic of misuse incidents, often caused by careless or inadequately trained applicators, has resulted in elevated air levels of the chemical in hundreds of homes, staggering property losses, and poisonings of homeowners, EPA still labels both chlordane and heptachlor as "gen-

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LETTERS

Mailman Exposed to Lawn Chems on Route

I am a letter carrier at the St. Cloud, MN post office. We have numerous lawn care people spraying Lord knows what on grass and shrubs. The management orders us to take all possible short cuts which means cutting across freshly sprayed lawns. I can only avoid this is if management recognizes the safety hazard involved.

I've been collecting as much information as I can and believe that some of the other individuals in my union (the National Association of Letter Carriers) are interested in taking up the issue as well. I think the time is right to bring the Post Office up to date on the dangers of chemicals and the potential of medical problems showing up in letter carriers who have to keep walking through treated grass.

Larry Brambrink
St. Cloud, MN

(For further information on lawn care, see article page 4.)

FRANK & ERNEST, BOB THAVES
I DIDN'T MIND THEM JUST WALKING AROUND, BUT THEN THEY INVENTED AGRICULTURE!
©1986 by NEA Inc
THAVES 5-16

Scientist Seeks Ideas to Improve Law

At the time of my college research on polychlorinated hydrocarbon insecticides in area waters I believed that the use and manufacture of such pesticides had been banned.

I have recently learned, to my horror, that these pesticides are still being used freely in other countries, and that they are being manufactured in the USA. More recently, I learned that special uses such as termite extermination are permitted using chemicals like aldrin.

How can we as concerned citizens, and in my case, as a concerned scientist, do something to combat the pesticide problems at hand? I want to know of key people in Congress to whom I can write or lobby in person. If there are other things I can do to hasten the day when these chemicals will be seen as the great danger that they truly are, please tell me.

Herbert Bresler
Crofton, MD

Eds. Note: Congress is currently deliberating reform of the federal pesticide law, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). You should write and call your congressional representatives and the newspapers on the issue, urging passage of legislation addressing both sides of the pesticide safety equation -- both improved health and safety testing of pesticides and controls governing pesticide users (see page 8). Write NCAMP for further suggestions for actions you can take in your community.

Pesticides and You, published by the National Coalition Against the Misuse of Pesticides (NCAMP), is a voice for pesticide safety and alternatives.

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Insecticide-Free Plantations Thrive

After bad experiences and ecological upsets by applying insecticides on banana plantations, we finally stopped spraying altogether in 1973. Since then, all of the banana insect pests have nearly disappeared. Enclosed is my 1984 paper documenting this. (Send NCAMP $1.00 for a copy.)

Clyde Stephens
United Fruit Co.
Panama, Panama

Victims Raise Tragedies Forcibly

I want you to know how excellent NCAMP's Fourth National Pesticide Forum was. Not only did I learn alot and make good contacts, but more importantly it expanded my vision of the pesticide issues that need our attention.

I have always been interested in resource and agricultural issues, which have drawn me toward the impacts of pesticide use on natural resources and human health. But the testimony of so many victims at the conference brought home to me the immediate tragedies caused every day by pesticides.

Pete Price
CA Assembly Office
of Research
Sacramento, CA

Up On The Farm

Catholic Worker/cpf

Farm Worker Union Negotiates Contract

Ending a seven year-old boycott of Campbell Soup Co., representatives of the Farm Labor Organizing Committee (FLOC), growers' associations from OH and MI, and Campbell February 18 signed a historic agreement providing for improved wages, housing, health care and working conditions. Also included in the agreement, which covers 600 FLOC members, is the establishment of "study committees to change or improve pesticide programs."

FLOC plans to negotiate similar contracts covering more of the approximately 65,000 migrant farm workers who work in five Midwest states every summer as well as the non-migrant workers. In this vein, FLOC plans to negotiate with the H.J. Heinz Company which, in a letter to NCAMP, has stated its interest in an "industry-wide approach" to these issues.

NCAMP Urges Improved Notification and Restrictions

EPA Proposes Regulations on Chemigation

After years of evading regulation, EPA February 26, 1986 released proposed label restrictions for chemigation designed to prevent aerial drift, ground- water contamination, and worker and public exposure –– areas not covered under Section 2(ee) of the the Federal Insecticide, Fungicide and Rodenticide Act. Practiced on approximately 4.6 million acres, chemigation is the process by which pesticides and fertilizers are injected into irrigation systems (see **PAY**, August, 1985).

The proposed Label Improvement Program (LIP) would: a) mandate that labels specifically provide chemigation use instructions; b) prohibit the practice without backflow controls to prevent ground-water contamination; c) prohibit aerial drift and runoff; and, d) mandate prior posting on signs in English and any other appropriate language which must remain in place until foliage is dry and surface water has disappeared.

Commenting on the LIP, NCAMP Board Member Allen Spalt proposed including wording which would: a) prohibit use of chemigation under poor weather conditions; b) restrict it from use where runoff or leaching could result; c) require posting at all points of access, alongside public roads and for properties within 1000 feet of the application; and, d) prohibit direct connections with a public water supply.

All products would have to bear the revised labeling by June 30, 1987.

EPA Plans Exposure Monitoring for 1987

Five years after dismantling the only federal system of compiling reports of pesticide exposure incidents, EPA is gearing up, under a federal legislative mandate, to initiate survey programs in 1987 (budget allowing...).

While not a general reporting system, the statistical surveys of hospital emergency rooms and "special areas" would help estimate and identify trends, provide specific information on hospitalizations (although, to its detriment, not noting the more subtle symptoms of exposure), and conduct special studies.

To ensure that data compilation continues, states have taken it upon themselves to initiate mandatory reporting programs of exposure incidents or hospitalizations. Such laws are currently in place in four states, California, Texas, Louisiana and New Jersey, however the latter three were only passed since 1985.

One in a series of NCAMP "How-To's"

Considerations in Choosing a Pesticide Residue Testing Lab

When do you need a laboratory?

If you foresee finding yourself in court, because of property damage or possible health effects, you will need to document your pesticide exposure.

Will positive results establish a link between health effects and pesticide exposure?

Not necessarily. Although cause and effect are difficult to establish, testing may detect the presence of the chemical in the physical or biological environment, thus strengthening a case.

What type of testing do you need?

You must decide, based on the nature of the chemical residue being tested for, what analyses are helpful to your case: a) *environmental testing*—soil, water, air, surface swabs, wood scrapings, carpet samples, etc. and/or b) *biological testing*—blood, urine, even fat biopsies. The biological tests required depend on the chemical involved. For example, a blood test can detect acetylcholinesterase enzyme depression caused by organophosphate poisoning. Phenoxy acid residues, however, are measured in the urine. Organochlorines can sometimes be detected in the blood, but 100 to 300 times more may be detected in fat tissue.

What analytical methodology must the laboratory be able to perform?

The lab should be using validated methods of analysis for the particular pesticide, such as those published in the Pesticide Analytical Manual, in the Association of Official Analytical Chemists Manual, or by EPA. It should have an internal quality assurance program in place to make sure instruments and personnel are performing well. Check samples should be run on positive or borderline positive samples.

What else should you know about the method used to detect pesticide residues?

In consultation with an independent scientist, either a toxicologist or an analytical chemist, determine how sensitive the method of analysis must be to be useful to you, and then determine whether the lab can perform reliable measurements at that level.

How should results be reported to me?

Numerical data should be reported in clearly identifiable units, for example, milligrams per liter, parts-per-million, etc. The laboratory should provide you with information about the adequacy of the method chosen for analysis, including percent recovery of spiked samples, results of a standard curve, and results of assay blanks.

More detailed information is available from NCAMP.

—*by Diane Baxter*

Citizens Oppose California Spraying

State Cited for Trespass

"The need summarily to abate a public nuisance does not of itself justify state invasion of legitimate privacy interests without consent or a warrant." So reads the ruling handed down December 19, 1985 on an appeal (3 Civ. 24444) of a 1984 Superior Court decision concerning the right of state applicators to enter private properties without consent or court order as part of the Japanese Beetle erradication program.

Initiative Takes Root

Numerous CA organizations are backing a "Toxics Initiative" for the November ballot.

The Initiative would: 1) require that no known carcinogens or teratogens (causing birth defects) be allowed to enter drinking water supplies; 2) require notice be given to the public before exposure to such chemicals; 3) provide citizens with the right to bring legal action should public officials fail do so; 4) require the publishing of a list of chemicals known to, or suspected of, causing cancer and birth defects.

Apple Maggots Go to Court

The California Coalition for Alternatives to Pesticides (CCAP) March 7 filed suit against the CA Department of Food and Agriculture charging that the 1986 eradication program violates constitutional rights, and several environmental, agricultural and public disclosure laws.

Gypsy Moth Spray Ban Lifted by Court

US District Court Judge James Reddon April 24 lifted an April 26, 1985 injunction against any federally funded spraying of chemical insecticides for Gypsy moth control (see **PAY**, June, 1985). The court had ruled that the Worst Case Analysis portion of the Enviromental Impact Statement was "unreadable" and placed an injunction on the use of chemical insecticides until the section was adequately rewritten.

Although a District Court appeal of the decision was denied, the case will be appealed to the 9th US Circuit Court of Appeals.

News From Around The Nation

Five States Move on Right-to-Know

Lawn Care Ordinances Sprout State Bills

Despite the defeat of a **Maryland** lawn care notification bill, state legislatures from Michigan to Connecticut have decided to forge ahead in their efforts to protect the public from pesticide exposure.

In **Michigan**, a Milford ordinance, which passed March 18, forms the basis of SB 65, a bill introduced by Senator Fessler. The ordinance requires lawn care companies to call all individuals on a registry 24 hours prior to a treatment and post signs for 72 hours after treatment, as well as to post decals in buildings with the date of the last application.

In **Ohio**, a bill prohibiting any local pesticide-related regulations is being battled out in the House after a narrow 17-14 Senate passage. At the same time, Senator Lee Fisher (D) is planning to introduce a strong lawn care notification bill in May.

New York state Assemblyman Francis Pordum has introduced four pesticide bills as amendments to the current lawn care law (Chapter 33 of the Environmental Conservation Law) which requires that applicators give their customers copies of the labels of pesticides to be used (this requirement was signed into law (PA 100) in **Connecticut** April 6). The bills address Right-to-Know requirements, weather restrictions, decal posting and tenant notification. Erie and Buffalo counties have been holding public hearings on problems associated with lawn care.

WI, Vancouver Parks Limit Pesticide Use

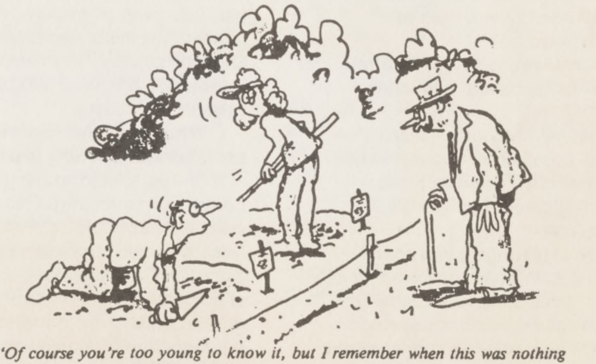
As a result of numerous complaints, grievances and media probing, the Milwaukee County, WI Board of Supervisors October 3, 1985 passed a "least use" pesticide policy for county property.

The guidelines direct program administrators to evaluate nonchemical alternatives, buy reduced amounts, develop notification programs, and improve worker training.

Meanwhile, although Vancouver, BC residents had asked only that notices be posted following pesticide applications, the city on August 19, 1985 banned the use of pesticides in all 2254 parks as well as on school grounds. Residents became concerned about the use of pesticides following the May, 1985 sicknesses of 38 school children after playing soccer on 2,4-D-treated fields and the death a week later of a four year-old boy from Reye's syndrome (in which exposure to Round-Up sprayed near where he had picnicked in the park was implicated).

ND Spray Programs Put Tordon in Water

North Dakota's water supply is being threatened by both the state's own roadside leafy spurge control program and general agricultural use. A 1985 state Health Department study has found Tordon (picloram) in four wells on the Turtle Mountain Indian reservation and in the wells of seven of eight other communities tested.



"Of course you're too young to know it, but I remember when this was nothing more than a toxic dumping site!"

chemicalWATCH

CHLORDANE

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eral use" pesticides, enabling them to be used by untrained applicators.

EPA is considering reclassifying the chemicals "restricted use" pending the completion of indoor air monitoring studies. This would require that any termiticide application be applied by a certified applicator or under his/her physical supervision or by a specially trained technician. Fourteen states have already put chlordane into "restricted use."

A 1985 University of Illinois study by graduate student Susan Menconi, who surveyed 86 chlordane-contaminated homes, suggests that high air-levels may result even under conditions of proper labelled use. A recently published Draft Environmental Impact Statement (DEIS) from New York's Department of Environmental Conservation (DEC) sampled the air from 1400 private homes and found detectable levels of chlordane in 75% of living-area samples taken.

As a follow-up to the DEIS, the DEC held public hearings April 2-4 soliciting comments on its proposal to ban permanently the use of the cyclodiene termiticides aldrin/ dieldrin, heptachlor, and chlordane, and restrict the termiticide use of chlorpyrifos (Dursban) to certified applicators and those under their supervision. NCAMP testified in support of that action. In 1985, Massachusetts banned the cyclodienes (see **PAY**, August, 1985).

Technical chlordane is a mixture of some 26 different components. It is also contaminated with the compound heptachlor, itself used as a termiticide, at levels that may approach 10-15%. Chlordane is both lipophilic (fat-soluble) and very volatile. It is easily absorbed by inhalation, or dermally. Once absorbed, both chlordane and heptachlor are extremely resistant to degradation. Their epoxide metabolites, oxychlordane and heptachlor epoxide, are not only more toxic, they, too, bioaccumulate in fatty tissue, can cross the placenta, and are excreted in breast-milk. A recent study found that 74% of American women surveyed excreted oxychlordane in their breast-milk.

Chlordane is acutely toxic to the central nervous system, although the mechanism of action is not understood. There is no antidote. Both chlordane and heptachlor are suspected human carcinogens, and cause liver cancer in mice. They have also been shown to cause immune depression, endocrine disturbances, and behavioral abnormalities in nursing mouse pups and their treated dams. In addition, there are disturbing reports linking human exposure to chlordane with the manifestation of blood dyscrasias and childhood leukemias.

Commercial production of chlordane began in 1947, while heptachlor was first commercially produced in 1953. In 1971, EPA began an internal review of all pesticides containing chlordane or heptachlor, which culminated in 1975 with a Notice of Intent to Suspend all registered uses, with the exception of subsurface ground insertion for termites, and dipping of roots and tops of nonfood plants. The final cancellation order was issued in 1978. However, many agricultural uses of both chemicals lingered on in the form of various and sundry "phase-outs," lasting in some cases (heptachlor) until 1983 (see page 1).

Mortgage lenders typically require insecticide treatment of homes where termites have been found before approval of housing loans. The organochlorines have generally been the products of choice. Often no records of prior treatment exist, and housing is retreated (illegally) again and again, even though the manufacturer, Velsicol, rates the efficacy of chlordane at 30 years and specifically instructs against wholesale retreatments on the label. The label serves as a legal document and failure to comply is illegal.

The cyclodiene termiticides are well-known to be extremely persistent in the environment. For example, residues have been found in treated fields 15 years after application. A 1985 University of Iowa study investigating the origin of chlordane contamination of fish from the Cedar Rapids area concluded that "one potential source ...may be house foundations treated with chlordane for termite control." The Iowa study is a disquieting indication of the difficulty in predicting which chemicals are likely to enter ground water, since the official position holds that chlordane binds too tightly to soil particles to leach.

ChemBRIEFS

Captofol/Captan/Folpet

Citing concerns over the ability of Captan, Captofol and Folpet to cause genetic damage and cancer, the West German government refused to extend the registration of the chemicals as of March 1, 1986 (except for the use of Captofol to treat tree wounds. All the products remain on the U.S. market.

The agency involved, the Biologische Bundesanstalt (Federal Biological Office) maintains that since the necessary wearing of protective clothing to protect workers from exposure cannot be ensured in practice, the chemicals should not have continued registration.

CHLORPYRIFOS

The level of interest in chlorpyrifos, also known as Dursban, Lorsban and Killmaster, has skyrocketed recently because this Dow Chemical product is considered to be the major chemical alternative to the organochlorine termiticides. An organophosphate insecticide, Dursban is also widely used in lawn care, agriculture, as a mosquito larvicide, and against fire ants and cockroaches.

Dursban is quite acutely toxic to bees, birds, mammals, aquatic life and certain species of algae, the rat LD50 being 135 mg/kg. Acute exposure can result in such symptomology as nausea, stomach cramps, headache, vision disturbances, muscle twitching, and in extreme cases, respiratory arrest. Organophosphates bind irreversibly to the active site of an essential enzyme for nerve impulse transmission, acetylcholine esterase, inactivating the enzyme. A common diagnostic for poisoning is to assay for blood acetylcholine esterase depression. It can take up to a month for a new enzyme to be resynthesized.

Available data indicates that Dursban is not a reproductive

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Chlorpyrifos, *continued from page 5*

toxin, teratogen, mutagen or carcinogen. However, EPA is requiring repeat carcinogenicity studies to be performed, maintaining the available tests are flawed. Recently, Italian researchers have published a disturbing report of an acute Dursban poisoning, resulting in delayed peripheral neuropathy (degenerative lesions of sensory, motor or reflex nerves). There are also reports of EEG (brainwave) pattern changes, sleep pattern and behavioral changes lasting over a year following exposure to organophosphate insecticides.

Dursban has been in use since 1966, and while all formulations are registered with EPA for general use, in certain states the more concentrated termiticide formulations are restricted for sale to, and use by, certified applicators only, or those under their supervision. There is very little data available on air levels or surface residues following application either as a termiticide or for indoor pest control. The American Conference of Governmental Industrial Hygienists recommends an occupational air level guideline of 200 micrograms/cubic meter (ug/m3) for a forty hour workweek. The National Academy of Sciences proposed a 10 ug/m3 air level for the general public, while EPA has proposed an air limit of 0.49 ug/m3 for children, and 1 ug/m3 for adult exposures.

In common with most organophosphates, Dursban has a relatively short biological half-life, roughly 24 hours in blood, sixty hours in fat, assuming that multiple or continual exposure does not occur, and it has shown no potential to bioaccumulate. Dursban is sensitive to alkali, light and microbial degradation. Eventually, it degrades completely to carbon dioxide and water, and it is not taken up by plants. The half-life of Dursban in water is relatively short, from a few days to two weeks. While it sorbs readily to sediments and organic matter, the major portion so bound is also gone in 30-35 days. The granular formulation has been found to be more persistent, however, and may persist as long as 180 days. Reports from the USDA Southern Forest Experimental Station note that Dursban is effective against termites for more than 15 years.

PYRETHRINS

Drawing from the pyrethrum of a wild growing African flower, a series of natural and synthetic pyrethrum-based insecticides have become widely used in both American agriculture and homes.

Pyrethrum is an extract from the flower heads of Chrysanthemum cinerinefolium, which strongly resembles a field daisy.

The insecticidal constituents of pyrethrum are six **pyrethrins** and several hundred synthetic analogues called **pyrethroids** (such as Fenvalerate, Permethrin, and Cypermethrin), invented by laboratory chemists primarily in an attempt to increase residual activity. Although pyrethrins have very effective "knockdown" properties, they are extremely sensitive to light, heat and moisture; their half-lives are measured in hours.

At least one of these synthetics, however, the chlorinated pyrethroid cypermethrin, has the same mode of action as DDT, and the same insect resistance problems are showing up in agriculture. Permethrin is a suspect carcinogen (see **PAY**, March, 1984).

Although purified pyrethrin extracts enjoyed wide use in the first part of the century, the industry was nearly dealt a deathblow by the advent of the far cheaper DDT. Pyrethrins survived marketplace pressure, however, because of three developments. One was combining it with aerosol, thus economizing on the amount of chemical delivered. A second was the inclusion of a synergist, piperonyl butoxide, which inhibits the ability of insects to inactivate absorbed pyrethrin. The third was the recognition that persistent chemicals like DDT exerted selective pressure on insect populations, which then became resistant to them. Pyrethrins do not persist long enough for insects to develop resistance. Resistance to the more persistent pyrethroids, however, develops more easily.

Pyrethrins and pyrethroids represent an advance in the development of pesticidal chemicals in that, unlike the organochlorines and organophosphates, they are much more selective in their acute toxicity to insects than to mammals. Pyrethrins are of very low acute toxicity to mammals, although they are quite toxic to fish. The mode of action is unclear, but pyrethrins are thought to disrupt ion transport at nerve membranes by the enzyme Na+/K+ ATPase. Although still not adequately tested, the only health effects so far reported have been allergic dermatitis and asthma-like symptoms. Interestingly, in 46% of 225 patients tested, there was a correlation between sensitivity to ragweed and sensitivity to pyrethrum. These reactions occur in response to a volatile oil present in unpurified pyrethrum extract, and not to purified pyrethrin preparations.

A report on concurrent exposure to lindane and phenothrin, a non-chlorinated pyrethroid, showed the development of gynecomastia (female secondary sex characteristics) in Haitian men held in a Miami, FL refugee center.

The major problem with pyrethrins and pyrethroids is expected to result from the the high percentage of inert ingredients present in the formulation, which are not identified on the label because their identity is trade secret information according to federal law. Pyrethrins are often formulated with oils or petroleum distillates in aerosol form, which when inhaled can cause allergic reactions, and even a dangerous chemical pneumonia. Petroleum distillates contain scores of polycyclic aromatic hydrocarbons, many of which are carcinogens, not to mention the leukemogen benzene.

METHYLENE CHLORIDE

An as yet unpublished study of 27 auto workers, performed by the Greater Cincinnati Occupational Health Center in collaboration with the National Institutes of Occupational Health (NIOSH), has found that long-term exposure to methylene chloride may cause organic brain disease and central nervous system dysfunction. National Toxicology Program studies demonstrate that it is also a potent carcinogen.

Methylene chloride, in this case used as a solvent, is found as an inert ingredient in at least 1750 pesticide formulations and as an active ingredient in another twenty (see **PAY**, March, 1986).

Resources

Pesticide Registration: An Evaluation of EPA's Progress, by the Natural Resources Defense Council. A valuable review of the adequacy of the 117 Registration Standards (RSs) completed as of September 30, 1985. The study reports that "only 8 [RSs) ... indicated that EPA possessed all required chronic data on the pesticide... 21 pesticides had no valid neurotoxicity, mutagenicity or chronic toxicity data... and only 11 [RSs] actually prohibit the expanded use of a pesticide where significant data gaps exist." 4 RSs "identified [food] tolerances as adequate and fully supported by necessary health and safety data." Outlines each RS. Send $10 to NRDC, 25 Kearny St., San Francisco, CA 94108.

The Occupational Health of Migrant and Seasonal Farmworkers in the United States, by Valerie Wilk of the Farmworker Justice Fund (FJF). A well-documented summary of farm worker data on a range of occupational health problems. Also included is an analysis of occupational health and safety laws and a handy chapter on available audio/visual and written materials and contacts in the different states. 125 pp. Free to farm worker and advocacy groups. Send $10 for members/ $15 for nonmembers to the National Rural Health Care Association, 2220 Holmes, Kansas City, MO 64108.

Directory of Environmental Lawyers in the West, Univ. of OR School of Law. Includes a useful biography describing areas of law practice and experience, cross referencing them in 20 subject areas and by state. The biographies also indicate whether the lawyer is willing to work for free or reduced rates for citizen groups, and whether he/she will share briefs and pleadings with other lawyers.

Send $4 to Land, Air, Water, the University of Oregon School of Law, Eugene, OR 97403.

Little Sioux River Synthetic Organic Compound Municipal Well Sampling Survey, by the Iowa Department of Water, Air, and Waste Managment. A disturbing report of wells which feed public water supplies indicating that any pesticide, even those with rapid decay rates, can leach into ground water. Pesticides, primarily terbufos and atrazine, as well as metolachlor, cyanazine, metribuzin, alachor, sulprofos, were the most commonly found contaminants. Data summaries of health effects are included. Write the agency at the Henry A. Wallace Bldg., 900 East Grand, Des Moines, IA 50319.

Pesticide Resistance: Strategies and Tactics for Management from the National Academy of Sciences Board on Agriculture. An in-depth analysis of population biology, detection, monitoring, risk assessment, and tactics for pest management. 471 pp. Send $28.50 to the National Academy Press, 2101 Constitution Ave., NW, Washington, DC 20418.

Bottled Water Not Tested for Toxins

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phenols. Food and Drug Administration (FDA) inspectors, however, only test the water if they suspect there is a problem, says one FDA official.

Although many of the larger bottlers use carbon filters to remove chemical contaminants, this is not required by federal law. Even distillation or deionization will not remove many pollutants.

Indeed, tests of seven brands of bottled water conducted in 1983 by the University of New Orleans, LA found traces of DDT, heptachlor, aldrin, dieldrin, gamma chlordane, benzene, carbon tetrachloride and toluene. A 1985 California Office of Assembly Research report found that traces of the carcinogens benzene and xylene were present in bottled waters. Currently no federal drinking water standards exist for any of the above chemicals.

According to critics, including those in the billion dollar bottled water industry led by the International Bottled Water Association, FDA is uninterested in studying the issue of bottled water or improving federal regulations. Says one FDA official, "our budget can only cover certain things. To initiate a bottled water program just to be doing it if we don't suspect a problem..., we just can't do it." Indeed, in an effort to set improved standards, at least 10 states, including California and Florida have passed more stringent laws.

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Editorial: Use Controls Critical To FIFRA Reform

Congress Urged To Address Total Pesticide Safety Equation

When a House Agriculture Subcommittee sat down on May 14 to "mark-up" (or vote) on legislation to reauthorize and reform the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the bulk of their work had been done by a range of environmental, industry farm and user groups. Behind-the-scenes negotiations resulted in agreements on a variety of issues, including reregistration and fees, cancellation procedures, groundwater protection, certification and training of pesticide applicators, and user record keeping.

EPA and the Chemical Specialty Manfacturers (CSMA), with Rep. Roberts (R-KS) at bat, successfully unravelled an agreement on the testing of inert ingredients. Rep. Morrison (R-WA) effectively deleted a requirement that EPA issue farmworker protection regulations.

While the subcommittee bill addresses both sides of the pesticide safety equation --safety testing and safe use-- there are still issues that need attention. These include regulation of inerts, drift control, enforcement, indoor air standards and farmworker protection.

Meanwhile, there are those planning to attach amendments to this legislation that would seriously weaken public protections. Three possible amendments include: (i) preemption of local communities' authority to adopt pesticide ordinances; (ii) preemption of state authority to establish food tolerances; and, (iii) establishment of an EPA pesticide registration as equivalent to an Environmental Impact Statement. House and Senate Agriculture Committee votes on the legislation are scheduled for late May and early June, respectively, with floor action to follow this summer or early Fall.

The Agriculture Committee must add critical language to their bill (inerts, drift, enforcement, indoor exposure and farmworker protection) and reject weakening amendments. Concerned legislators can write the Agriculture Committees on these matters and support floor action if problems remain in Committee bills.

—by Jay Feldman

NEPA Regs Attacked By Industry and CEQ

Efforts underway at both the regulatory and legislative levels could seriously undermine the quality of information now required to assess the environmental impact of federally funded pesticide programs.

The Reagan-appointed Council on Environmental Quality (CEQ) Friday, April 25 published a final rule in the Federal Register (pp. 15618-15626) announcing numerous changes to the Environmental Impact Statement (EIS) required in many cases under the National Environmental Policy Act (NEPA), including abolishing the controversial "worst case analysis" provision. The provision has halted numerous federal pesticide programs because of government noncompliance with its requirements.

NCAMP's Technical Report

For all who need to know the latest news in the pesticide arena, NCAMP is now publishing a monthly "Technical Report." The "Report" will help you plug into the latest pending and recent decisions at both the federal and local level. Subscriptions are $20 for individual members and subscribers, $30 for individual non-members and subscribers and $70 corporate/government subscribers and non-members.

Controversial changes in the new regulations will still require agencies to consider low probability effects, but only those that are "reasonably foreseeable" and are supported by "credible scientific evidence." Critics fear that the implications of missing safety test data would thus not be considered adequately and, as a result, are considering a court challenge.

Legislative language proposed in Sen. Helms/ Rep. Roberts' FIFRA reauthorization bill (S 2346, HR 4513) would essentially establish an EPA Registration Standard as equivalent to an EIS. A Standard, however, merely outlines the availability of test data required for registration, regardless of its validity (see Resources page 7). The language, not incorporated into the bill passed by the House Agriculture Subcommittee May 14, can still be introduced in Committee and on the House floor or in the Senate (see above article).

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